

## **ABSTRACT**

An apparatus for digitally processing signals within wireless communications basestations which includes a channel pooling signal processor and a digital signal processor.

The channel pooling signal processor includes a plurality of computation units typically

realized in a heterogeneous multiprocessing architecture, a test interface for testing the
function of the plurality of the computation units, a general-purpose microprocessor for
managing the dataflow into and out of the channel pooling signal processor as well as
effecting the control and configuration of the computation units, and an interconnect
mechanism for connecting the plurality of computation units to the input, output, test

interface, and the general-purpose microprocessor.

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